

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of coordinating uplink transmissions from first and second mobile units, each having first and second groups of uplink channels,
comprising:

determining timing associated with [[a]] first uplink channel group from [[a]] the first
mobile unit to a base station;

determining timing associated with the second uplink group from the second mobile
station to the base station;

receiving a grant signal permitting transmission of information over [[a]] the second
uplink channel group from the first mobile unit to the base station; and

transmitting information from the first mobile station over the second uplink channel
group at a time related to the timing of the first uplink channel group of the first
mobile station and the timing associated with the second uplink group from the
second mobile station ~~a time at which the grant signal is received.~~
2. (Currently Amended) A method, as set forth in claim 1, wherein transmitting
information over the second uplink channel group further comprises transmitting
information over the second uplink channel group at a time near a preselected target
time while maintaining substantial orthogonality with the timing of the first uplink
channel group of the first mobile unit.
3. (Currently Amended) A method, as set forth in claim 2, wherein transmitting
information over the second uplink channel group at a time near a preselected target

time further comprises transmitting information over the second uplink channel group at a time near a preselected period of time after receiving the grant signal.

4. (Currently Amended) A method, as set forth in claim 1, wherein transmitting information over the second uplink channel group further comprises transmitting information over the second uplink channel group a preselected duration of time after the timing associated with the first uplink channel group of the first mobile unit.
5. (Currently Amended) A method, as set forth in claim 4, wherein transmitting information over the second uplink channel group a preselected duration of time after the timing associated with the first uplink channel group further comprises determining the preselected duration of time by multiplying a variable (m) times a constant, wherein the constant is related to the timing of the first uplink channel group of the first mobile unit.
6. (Currently Amended) A method, as set forth in claim 5, wherein determining the preselected duration of time further comprises multiplying a variable (m) times a constant, wherein the constant is a portion of time associated with the timing of the first uplink channel group of the first mobile unit.
7. (Previously Presented) A method, comprising:
determining timing associated with a first channel;

receiving a grant signal permitting transmission of information over a second channel;

and

transmitting information over the second channel at a time related to the timing of the first channel and a time at which the grant signal is received, wherein transmitting information over the second channel further comprises transmitting information over the second channel a preselected duration of time after the timing associated with the first channel, and wherein transmitting information over the second channel a preselected duration of time after the timing associated with the first channel further comprises determining the preselected duration of time by multiplying a variable (m) times a constant, wherein the constant is related to the timing of the first channel, and wherein determining the preselected duration of time further comprises multiplying a variable (m) times a constant, wherein the constant is about 10% of a period of time associated with the timing of the first channel.

8. (Previously Presented) A method, as set forth in claim 1, wherein receiving the grant signal further comprises receiving a grant signal from the base station permitting transmission of information by the first mobile [[device]] over the second uplink channel group of the first mobile unit.
9. (Previously Presented) A method, as set forth in claim 1, wherein determining timing associated with the first uplink channel further comprises determining timing

associated with a first uplink channel group of the second mobile unit based on timing used to transmit information from a second mobile [[device]] unit to the base station.

10. (Currently Amended) A method of coordinating uplink transmissions from first and second mobile units, each having first and second groups of uplink channels,
comprising:

determining timing associated with a first uplink channel group from [[a]] the first mobile unit to a base station;'

determining timing associated with the second uplink group from the second mobile station to the base station;

receiving a grant signal permitting transmission of information over [[a]] the second uplink channel group from the first mobile unit to the base station; and

transmitting information over the second uplink channel group at a time near a preselected target time while maintaining substantial orthogonality with the timing of the first uplink channel group of the first mobile unit and such that the information transmitted over the second uplink channel group of the first mobile unit does not substantially interfere with information transmitted over the second uplink channel group of the second mobile unit.

11. (Previously Presented) A method, as set forth in claim 10, wherein transmitting information over the second uplink channel group of the first mobile unit at a time near a preselected target time further comprises transmitting information over the second uplink channel group of the first mobile unit at a time near a preselected period of time after receiving the grant signal.

12. (Previously Presented) A method, as set forth in claim 10, wherein transmitting information over the second uplink channel group of the first mobile unit further comprises transmitting information over the second uplink channel a preselected duration of time after the timing associated with the first uplink channel group of the first mobile unit.
13. (Previously Presented) A method, as set forth in claim 12, wherein transmitting information over the second uplink channel group of the first mobile unit a preselected duration of time after the timing associated with the first uplink channel group of the first mobile unit further comprises determining the preselected duration of time by multiplying a variable (m) times a constant, wherein the constant is related to the timing of the first uplink channel group of the first mobile unit.
14. (Previously Presented) A method, as set forth in claim 13, wherein determining the preselected duration of time further comprises multiplying a variable (m) times a constant, wherein the constant is a portion of time associated with the timing of the first uplink channel.
15. (Previously Presented) A method, comprising:
determining timing associated with a first channel;
receiving a grant signal permitting transmission of information over a second channel; and

transmitting information over the second channel at a time near a preselected target time while maintaining substantial orthogonality with the timing of the first channel, wherein transmitting information over the second channel further comprises transmitting information over the second channel a preselected duration of time after the timing associated with the first channel, wherein transmitting information over the second channel a preselected duration of time after the timing associated with the first channel further comprises determining the preselected duration of time by multiplying a variable (m) times a constant, wherein the constant is related to the timing of the first channel, wherein determining the preselected duration of time further comprises multiplying a variable (m) times a constant, wherein the constant is a portion of time associated with the timing of the first channel, and wherein determining the preselected duration of time further comprises multiplying a variable (m) times a constant, wherein the constant is about 10% of a period of time associated with the timing of the first uplink channel.

16. (Previously Presented) A method, as set forth in claim 10, wherein receiving the grant signal further comprises receiving a grant signal from the base station permitting transmission of information by the first mobile device over the second uplink channel group of the first mobile unit.
17. (Previously Presented) A method, as set forth in claim 10, wherein determining timing associated with the first uplink channel group of the first mobile unit further comprises determining timing associated with a first uplink channel group of the

second mobile unit based on timing information used to transmit information from
[[a]] the second mobile device to the base station.

18. (New) The method of claim 1, comprising receiving a grant signal permitting transmission of information over the second uplink channel group from the second mobile unit to the base station.

19. (New) The method of claim 18, comprising transmitting information from the second mobile station over the second uplink channel group at a time related to the timing of the first uplink channel group of the second mobile station and the timing associated with the second uplink group from the first mobile station.

20. (New) The method of claim 19, comprising transmitting the information from the first mobile station over the second uplink channel group at a time selected so that the information transmitted over the second uplink channel group of the first mobile unit does not substantially interfere with the information transmitted over the second uplink channel group of the second mobile unit.

21. (New) The method of claim 10, comprising receiving a grant signal permitting transmission of the information over the second uplink channel group from the second mobile unit to the base station.

22. (New) The method of claim 21, comprising transmitting information from the second mobile station over the second uplink channel group at a time related to the timing of the first uplink channel group of the second mobile station and the timing associated with the second uplink group from the first mobile station.

23. (New) The method of claim 22, wherein transmitting the information from the second mobile station over the second uplink channel group comprises transmitting the information from the second mobile station over the second uplink channel group while maintaining substantial orthogonality with the timing of the first uplink channel group.